

## Basic Elements of Phase I and II Environmental Site Assessments

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There are numerous risks involved with starting your own business. One of the more costly ones can be dealing with hazardous waste contamination discovered on property you have recently acquired. An environmental site assessment performed prior to acquiring that property can help minimize that risk. Learn more about what you can do to minimize the risk of hazardous waste clean up costs prior to making a property purchase.

### ***Be An Informed Consumer***

Some people take a used car to a mechanic for a once-over before they buy. Most people hire a building inspector to check out a house they wish to purchase. You should do the same thing when considering a commercial or industrial property purchase. To that end, **Phase I and Phase II Environmental Site Assessments (ESAs)** have been developed to look at the environmental issues at a site previously used for commercial purposes.

Standards for the Phase I and Phase II ESAs have been established by the American Society for Testing and Materials (ASTM) to address the “appropriate inquiry” aspect to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLA contains national policy and procedures for containing or removing hazardous substances that have been released, and also provides funding and guidance for cleaning up the nation's worst abandoned and contaminated hazardous waste sites. Be aware that there may be other state or local regulations or federal regulations outside of CERCLA that have other site assessment requirements.

### ***What is a Phase I ESA?***

The Phase I ESA involves a review of records, a site visit, and interviews with owners, occupants and local government officials. While sampling and laboratory analysis is not included in this phase, it should still

be conducted by an environmental professional who is trained in the appropriate standards. The review of government records and interviews may take a lot of time, so be sure to allow for plenty of time if you want a quality assessment.

Contamination may not always be the result of activities that took place on the particular site of interest to you. It may also be the result of contamination of a nearby property. The records and interviews will be the best source to lead you to this information. Public records are available regarding the location of properties that have been classified as contaminated by federal or state regulations. Depending on their proximity to your site, there is a likelihood that their contamination had made its way to your site in some fashion.

### ***What is a Phase II ESA?***

If a Phase I ESA identifies potential contamination of the site with hazardous materials, then a Phase II ESA is conducted. The Phase II ESA will include sampling and laboratory analysis to confirm the presence of hazardous materials and then determine the extent of the contamination. Some of the tests that may be performed are:

- superficial soil and water samples;
- subsurface soil borings;
- groundwater monitoring well installation, sampling, and analysis (may be appropriate on neighboring properties as



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- well to determine full extent of contamination);
- drum sampling (if any were left on the property);
- sampling of dry wells, floor drains and catch basins;
- transformer/capacitor sampling for PCBs;
- geophysical testing for buried tanks and drums;
- testing of underground storage tanks.

Depending on the results of the samples, the Phase II ESA should outline the remedial actions required to clean up the property.

### ***How are ESAs Performed?***

Each Phase I or II ESA should be performed by a trained and experienced environmental professional. The environmental professional should follow the ASTM Standards shown. They may also know of other state or local regulations or federal regulations outside of CERCLA that have other site assessment requirements.

<u>ESA</u>	<u>ASTM Standards</u>
Phase I	E 1527-94, E 1528-93
Phase II	E 1903-97, +others

You can find environmental professionals listed in your Yellow Pages under Engineers - with possible sub-headings of Consulting, Environmental, Geotechnical, or others - that may advertise they can perform ESAs. Be sure to ask for and check references for any firm you consider hiring.

Hiring a firm with less than acceptable experience or training can only compound your risk if they fail to provide you with accurate data. Contact the Small Business Clean Air Assistance Program (SBCAAP), see below, for an additional checklist of questions to ask any firm you consider hiring.

### ***What Do You Do With the Results?***

You know if your site is contaminated so, what should be done to clean it up. Use the information resulting from your Phase I and II ESAs in your purchase agreement. A couple options may be:

- ❶ Require that the current landowner clean up the property prior to the sale.
- ❷ Reduce the cost of property commensurate with the cost of the remediation required.

If you do that, you will want to keep in mind the question "How Clean is Clean?" when working out the details. If left up to the seller, it may not be clean enough for you. The level of experience of the environmental professional you hire to perform the ESAs can help you here by proposing the most up-to-date remedial methods and reasonable cost estimates. Final details on who covers the cost to clean up as well as criteria for "how clean is clean" should be included in your final contract with the seller.

### ***Clean Up Costs***

There may be grant funds available to whomever must cover the costs through a state or federal Brownfield grants program. Go to <http://www.commerce.state.wi.us/CD/CD-bfi-grants.html> or call 608/261-7714 for details.



### ***Contacts for More Information or Assistance.***

The Small Business Clean Air Assistance Program helps smaller businesses understand and comply with the Clean Air Act regulations. Contact one of the program's Clean Air Specialists for more assistance: Renée Lesjak Bashel at 608/264-6153 or Tom Coogan at 608/267-9214.



For further information on hiring an environmental engineering firm you can go directly to our website at [www.wienvirohelp.com](http://www.wienvirohelp.com), click on Publications in the left-hand navigation bar, and then under "General Information for Any Sector" look for the link to a document titled "Environmental Consultants" and click to open the PDF file (you need Acrobat Reader from [www.adobe.com](http://www.adobe.com) to read PDF).